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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|--------------------------------------|----------------------|---------------------|------------------|
| 10/674,017 | 09/30/2003 | Myoung-Kee Baek | 8734.240.00 US | 2379 |
| | 7590 05/04/2007 ONG & ALDRIDGE LI | EXAMINER | | |
| 1900 K STREE | T, NW | TALBOT, BRIAN K | | |
| WASHINGTO | N, DC 20000 | • | ART UNIT | PAPER NUMBER |
| | | • | 1762 | |
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| | | | MAIL DATE | DELIVERY MODE |
| | | | 05/04/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) | | | | |
|--|---|-------------------|--|--|--|--|
| Office Action Comments | 10/674,017 | BAEK ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Brian K. Talbot | 1762 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 22 Fe | | | | | | |
| | action is non-final. | | | | | |
| ·= | ' - | | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| · | x parte quayre, 1000 0.2. 11, 10 | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-13</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) 1-13 is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/or | 8) Claim(s) are subject to restriction and/or election requirement. | | | | | |
| Application Papers | · | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the | drawing(s) be held in abeyance. See | e 37 CFR 1.85(a). | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| <u> </u> | | (4) - (0 | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | . bassa basan na asissa d | • | | | | |
| · · · · · · · · · · · · · · · · · · · | 1. Certified copies of the priority documents have been received. | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). | | | | | | |
| * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
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| Attachment(s) | | | | | | |
| 1) X Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date 3) Notice of Informal Patent Application | | | | | | |
| Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | 5) Notice of Informal Page 6) Other: | ателт Аррисатіол | | | | |
| S Patent and Trademark Office | , | | | | | |

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1. Claims 1-13 remain in the application.

2. In light of the request for reconsideration filed 2/22/07, the 35 USC 112 first and second

paragraph rejections have been withdrawn. In addition, the reference Kim et al. (2003/0124866)

has been removed as prior art.

3. This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on

sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1,2,6-8 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Hattori et al. (5,403,616).

Hattori et al. (5,403,616) teaches a method of forming patterned transparent conductive film. The patterning process comprises forming a masking pattern (2) on a substrate (10), applying the coating layer (3), heating the coating layer and the mask to set the coating layer and remove the mask to form the patterned layer (abstract, Figs. 1a-1e, 2a-2e and col. 2, line 60 – col. 3, line 65). Hattori et al. (5,403,616) teaches the process utilized for LCD devices (col. 1, lines 9-25). The glass substrate can have a coating of silica thereon prior to the application of the patterned coating layer (examples). The coating layer can be applied by spin coating, dip coating or roll coating (col. 4, lines 41-64).

With respect to claims 3 and 10 which recite supplying the resist material with a doctor blade, it is the Examiner's position that one skilled in the art at the time the invention was made would have had a reasonable expectation of achieving similar success with a doctor blade applicator as opposed to roller applicator for the material as both process for forming layers and filling openings are commonplace in the art. Furthermore, Hattori et al. (5,403,616) teaches screen printing the masking material which is known to use a doctor blade to apply material through a masking/screen. The Examiner recognizes that the resist material is being claimed as the coating material and not the masking material of Hattori et al. (5,403,616), it is the Examiner's position that this supports the Examiner's position that utilizing a doctor blade in conventional in the art.

With respect to claims 4,11 and 13 which recite separating the master and the substrate by a few micrometers, it is the Examiner's position that one skilled in the art would have had a

reasonable expectation of achieving similar success regardless of whether or not the master was

"displaced" from the substrate or directly contacting it. This would be a matter of design choice

by one practicing in the art as both processes are know to produce desirable results for forming a

patterned layer.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the

manner in which the invention was made.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hattori et al.

(5,403,616) in combination with Applicant's admitted state of the art (specification pg. 2-5 and

Figs. 1-2).

Hattori et al. (5,403,616) fails to teach and etching layer being metal.

Applicant's admitted state of the art (specification pg. 2-5 and Figs. 1-2) teaches that gate

electrodes, drain electrodes and pixel electrodes are formed on a glass substrate for LCD

manufacture.

Therefore it would have been obvious for one skilled in the art at the time the invention

was made to have modified over Hattori et al. (5,403,616) process by including a metal electrode

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layer to be etched as evidenced by Applicant's admitted state of the art (specification pg. 2-5 and Figs. 1-2) with the expectation of achieving similar success, i.e. a patterned layer.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K. Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 8AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy H. Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Brian K Talbot Primary Examiner Art Unit 1762

DUS 5/1/07